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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,093	11/28/2007	Valery Alexandrovich Astafiev	25065-33	9788
7590 John B Hardaway, III Nexsen Pruet, LLC P.O. Box 10107 Greenville, SC 29603				
EXAMINER				
MONDT, JOHANNES P				
ART UNIT		PAPER NUMBER		
3663				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/574,093

Applicant(s)

ASTAFIEV ET AL.

Examiner

JOHANNES P. MONDT

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 23, 2010, and April 14, 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-10, 12, 14, 15, 17-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 4-10, 12, 14, 15, 17-19 and 21-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the revival of the application: see Petition Decision mailed June 23, 2010; and to the amendment filed April 14, 2010, in which applicant cancelled all independent claims 1, 11 and 16, as well as dependent claims 2-3, 13 and 20, and introduced new claims 21-24. Claims 4-10 by amendment now depend on independent claim 21, claims 12, 14 and 15 depend by amendment on claim 23, and claims 17-19 now depend on claim 24.
2. Said amendment necessitates a conclusion of lack of unity of the invention in light of PCT Rules 13.1 and 13.2, as follows:

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- Group I, claims 21, 4-10 and 22, drawn to a method for producing tablets of a ceramic nuclear fuel.
- Group II, claims 23 and 12, 14 and 15, drawn to a device for preparing a molding powder of ceramic nuclear fuel.
- Group III, claims 24 and 17-19, drawn to a container.

The groups of inventions listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Neither claim 23 nor claim 24 shares any special technical feature with the group I invention for the following reasons:

(a) Regarding claim 23, Applicant admits as prior art, in particular: as being anticipated by Men'shikova et al (see abstract of Men'shikova et al and Specification-as-filed, page 6, lines 15-22) a device comprising

a protective chamber,

a charging unit capable of charging dosages of starting powdered components and a grinding process initiating agent into the container,

a grinding and intermixing unit comprising

a coil; and

a tube of non-magnetic material in said coil capable of receiving said container and inductor;

a powder granulation unit, as well as

a container conveying and positioning system to move said container between the aforementioned units.

Although the aforementioned prior art does not necessarily teach the "vertically arranged axis", "circuit", the tube being "blanked off" and "conveying box" as claimed, one of ordinary skill in the art would have deemed it obvious and lacking of any inventive step to blank off a tube on one end when the functionality of the tube, as in the underlying case, is restricted to receive a container, especially considering that the container's contents include powder material; and would have deemed it equally obvious and lacking of any inventive step to arrange the tube and inductor vertically, so as not to spill any powder, while both (inductor?) coil and tube inherently have an axis, and said axis is

shared when, as here, the tube is located in said coil. Because the processes of the respective units are obviously repeatable in cycle anyone of ordinary skill in the art of article handling would have deemed it obvious and lacking of any inventive step to arrange the unit in a circuit. The claimed "conveyor box" would equally be deemed obvious and lacking of any inventive step, being a mere expedient for moving the container from the protective chamber, said motion being in need of implementation. As a result of its lacking an inventive concept claim 23 cannot possibly share a special inventive technical feature with the Group I invention claims.

(b) Regarding claim 24, Applicant admits as prior art, in particular: as being anticipated by Men'shikova et al (see abstract of Men'shikova et al and Specification-as-filed, page 7, lines 13-18):

a container comprising a cylinder-shaped vessel from a non-magnetic material having a hermetic sealing unit in the form of a valve at an end face thereof. Said cylinder-shaped area also comprises a working zone on its inner side (abstract and Drawing).

Said prior art does not necessarily teach the limitations that said hermetic sealing unit is to comprise a valve separated from said cylinder-shaped area by a transversal meshed partition and connected to said cylinder-shaped area by a flanged joint; nor does said working zone necessarily have a chamfered junction to a flat bottom thereof.

However, said limitations do not involve an inventive step in view of Suzuki et al (US 6, 130, 262), previously made of record, who, in a patent on an apparatus for electromagnetic production of a composition, in particular a stirring process (abstract), hence art analogous to said prior art, teach a partition 61 (col. 8, l. 39-56, Figure 5) having many holes, hence "meshed", being inter alia in the lateral direction, and a (ball) valve 69 having an interior space isolated from the cylinder-shaped vessel of the container 42 (col. 8, l. 18-56 and Figure 5; title and abstract), said valve being connected to said cylinder-shaped area (here defined by vessel 42) via a flanged joint (met by the L-shaped upwardly extending flanges connecting 69 with 42: see Figure 5), while a chamfered junction is in evidence at the flat bottom of the working zone.

. The inclusion of ball valve, flanged joint and meshed partition would have been obvious to one of ordinary skill in the art as conventional means for controlling access and protection content, and hence lacking of an inventive step. Evidently, access control and content protection are equally important also for the container by Men'shikova et al, because the container shelters the working zone in which the contents have to be carefully selected and protected after selection. The chamfered junction merely shapes the working zone. In the absence of a convincing argument that a particular configuration or shape is significant or anything more than one of numerous configurations a person of ordinary skill in the art would find obvious said configuration or shape does not carry patentable weight. See *Graham v. John Deere Co.*, 383 US 1, 148 USPQ 459.

In view of the relative complexity of subject matter and restriction requirement no telephone call was made.

As a result of its lacking of an inventive step, claim 24 cannot possibly share a special inventive technical feature with any of the claims of the Group I invention.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention or species.

Should applicant traverse on the ground that the inventions have unity of invention (37 CFR 1.475(a)), applicant must provide reasons in support thereof. Applicant may submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. Where such evidence or admission is provided by applicant, if the examiner finds one of

the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHANNES P. MONDT whose telephone number is (571)272-1919. The examiner can normally be reached on 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/JOHANNES P MONDT/

Primary Examiner, Art Unit 3663

August 25, 2010.